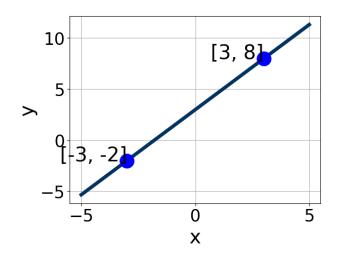
$$\frac{7x-8}{4} - \frac{9x+5}{8} = \frac{5x-7}{7}$$

- A. $x \in [-68.2, -66.2]$
- B. $x \in [-2.23, 2.77]$
- C. $x \in [-22.2, -15.2]$
- D. $x \in [-5.2, -2.2]$
- E. There are no real solutions.
- 2. Write the equation of the line in the graph below in Standard Form Ax + By = C. Then, choose the intervals that contain A, B, and C.



- A. $A \in [5, 8], B \in [1.24, 3.48], \text{ and } C \in [7.4, 9.5]$
- B. $A \in [-2.67, 3.33], B \in [-2.13, -0.61], \text{ and } C \in [-4.5, -2.9]$
- C. $A \in [5, 8], B \in [-3.76, -1.94], \text{ and } C \in [-9.2, -7.4]$
- D. $A \in [-2.67, 3.33], B \in [0.53, 1.28], \text{ and } C \in [1.3, 3.4]$
- E. $A \in [-7, -4]$, $B \in [1.24, 3.48]$, and $C \in [7.4, 9.5]$
- 3. Find the equation of the line described below. Write the linear equation

in the form y = mx + b and choose the intervals that contain m and b.

Parallel to 9x - 5y = 11 and passing through the point (-8, 8).

- A. $m \in [0.9, 2.6]$ $b \in [15, 18]$
- B. $m \in [0.9, 2.6]$ $b \in [-22.4, -20.4]$
- C. $m \in [-2.8, -1.2]$ $b \in [-9.4, -1.4]$
- D. $m \in [-0.1, 1.2]$ $b \in [21.4, 24.4]$
- E. $m \in [0.9, 2.6]$ $b \in [21.4, 24.4]$
- 4. Solve the equation below. Then, choose the interval that contains the solution.

$$-7(-19x - 4) = -10(-2x - 15)$$

- A. $x \in [1.14, 1.63]$
- B. $x \in [0.78, 1.1]$
- C. $x \in [-1.34, -0.95]$
- D. $x \in [-1.7, -1.34]$
- E. There are no real solutions.
- 5. Find the equation of the line described below. Write the linear equation in the form y = mx + b and choose the intervals that contain m and b.

Parallel to 5x + 3y = 4 and passing through the point (-10, 7).

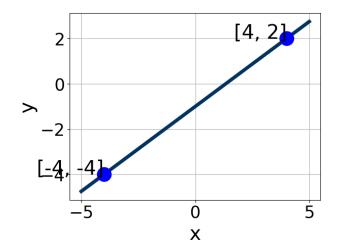
- A. $m \in [-2.68, -1.16]$ $b \in [-12.67, -1.67]$
- B. $m \in [-2.68, -1.16]$ $b \in [7.67, 12.67]$
- C. $m \in [-0.34, 2.7]$ $b \in [22.67, 24.67]$
- D. $m \in [-2.68, -1.16]$ $b \in [17, 21]$
- E. $m \in [-1.51, -0.19]$ $b \in [-12.67, -1.67]$

$$\frac{-3x+9}{5} - \frac{-5x+5}{2} = \frac{6x+7}{4}$$

- A. $x \in [-6.38, -3.38]$
- B. $x \in [7.5, 10.5]$
- C. $x \in [-2.61, 0.39]$
- D. $x \in [3.13, 7.13]$
- E. There are no real solutions.
- 7. First, find the equation of the line containing the two points below. Then, write the equation in the form y = mx + b and choose the intervals that contain m and b.

$$(-6, -3)$$
 and $(10, -8)$

- A. $m \in [-0.81, -0.1]$ $b \in [2.1, 3.4]$
- B. $m \in [-0.81, -0.1]$ $b \in [4.4, 7]$
- C. $m \in [-0.81, -0.1]$ $b \in [-19.2, -17]$
- D. $m \in [-0.81, -0.1]$ $b \in [-6.2, -4.4]$
- E. $m \in [-0.2, 0.42]$ $b \in [-11.9, -11.1]$
- 8. Write the equation of the line in the graph below in Standard Form Ax + By = C. Then, choose the intervals that contain A, B, and C.



- A. $A \in [-1.7, 2.6], B \in [0.2, 2.1], \text{ and } C \in [-1.5, -0.4]$
- B. $A \in [-3.8, -1.5], B \in [2.6, 4.3], \text{ and } C \in [-5.2, -3.5]$
- C. $A \in [-1.7, 2.6], B \in [-3.2, -0.2], \text{ and } C \in [-0.4, 2.3]$
- D. $A \in [1.8, 3.1], B \in [-5.6, -1.8], \text{ and } C \in [2.8, 4.9]$
- E. $A \in [1.8, 3.1], B \in [2.6, 4.3], \text{ and } C \in [-5.2, -3.5]$
- 9. First, find the equation of the line containing the two points below. Then, write the equation in the form y = mx + b and choose the intervals that contain m and b.

$$(5,7)$$
 and $(2,6)$

- A. $m \in [-0.2, 1.5]$ $b \in [-0.43, 3.03]$
- B. $m \in [-0.2, 1.5]$ $b \in [3.69, 4.44]$
- C. $m \in [-0.2, 1.5]$ $b \in [4.59, 5.78]$
- D. $m \in [-0.2, 1.5]$ $b \in [-6.33, -5.05]$
- E. $m \in [-2.3, -0.1]$ $b \in [6.03, 7.9]$
- 10. Solve the equation below. Then, choose the interval that contains the solution.

$$-6(-4x+9) = -3(-8x-17)$$

A. $x \in [-0.04, 0.05]$

B.
$$x \in [0.05, 0.1]$$

C.
$$x \in [-0.04, 0.05]$$

D.
$$x \in [-0.04, 0.05]$$

- E. There are no real solutions.
- 11. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{-4x-7}{7} - \frac{3x-5}{4} = \frac{-9x+8}{5}$$

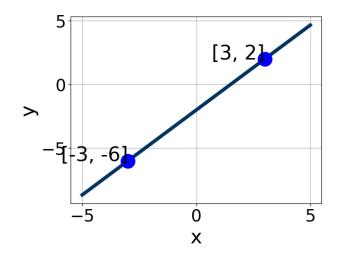
A.
$$x \in [2.82, 5.82]$$

B.
$$x \in [19.9, 22.9]$$

C.
$$x \in [-0.32, 2.68]$$

D.
$$x \in [7.04, 13.04]$$

- E. There are no real solutions.
- 12. Write the equation of the line in the graph below in Standard Form Ax + By = C. Then, choose the intervals that contain A, B, and C.



A.
$$A \in [-3.2, -0.6], B \in [-0.47, 2.53], \text{ and } C \in [-2.6, -1.5]$$

B.
$$A \in [3.6, 4.2], B \in [-4.11, -1.78], \text{ and } C \in [5.4, 7.9]$$

C.
$$A \in [-3.2, -0.6], B \in [-1.64, 0.98], and C \in [1.9, 4]$$

D.
$$A \in [-4.8, -3], B \in [2.28, 3.26], \text{ and } C \in [-9.4, -4.7]$$

E.
$$A \in [3.6, 4.2], B \in [2.28, 3.26], \text{ and } C \in [-9.4, -4.7]$$

13. Find the equation of the line described below. Write the linear equation in the form y = mx + b and choose the intervals that contain m and b.

Perpendicular to 6x - 7y = 6 and passing through the point (7, -2).

A.
$$m \in [-0.91, -0.66]$$
 $b \in [2, 6.5]$

B.
$$m \in [-1.52, -1.16]$$
 $b \in [2, 6.5]$

C.
$$m \in [-1.52, -1.16]$$
 $b \in [-9.4, -7.3]$

D.
$$m \in [1.14, 1.33]$$
 $b \in [-10.2, -9.8]$

E.
$$m \in [-1.52, -1.16]$$
 $b \in [-7.6, -5.5]$

14. Solve the equation below. Then, choose the interval that contains the solution.

$$-11(-8x+10) = -6(-13x+17)$$

A.
$$x \in [20.5, 21.5]$$

B.
$$x \in [0.2, 1]$$

C.
$$x \in [-22.5, -20.4]$$

D.
$$x \in [1.1, 2.2]$$

E. There are no real solutions.

15. Find the equation of the line described below. Write the linear equation in the form y = mx + b and choose the intervals that contain m and b.

Parallel to 7x - 6y = 12 and passing through the point (2, -9).

A.
$$m \in [0.76, 1.05]$$
 $b \in [-11.78, -11.17]$

B.
$$m \in [1.13, 1.3]$$
 $b \in [11.14, 11.58]$

C.
$$m \in [-1.45, -1.1]$$
 $b \in [-7.04, -6.43]$

D.
$$m \in [1.13, 1.3]$$
 $b \in [-11.01, -10.53]$

E.
$$m \in [1.13, 1.3]$$
 $b \in [-11.78, -11.17]$

$$\frac{7x-8}{5} - \frac{5x+4}{7} = \frac{4x-7}{8}$$

A.
$$x \in [-1.08, 0.3]$$

B.
$$x \in [0.51, 0.88]$$

C.
$$x \in [26.71, 27.58]$$

D.
$$x \in [6.5, 7.26]$$

- E. There are no real solutions.
- 17. First, find the equation of the line containing the two points below. Then, write the equation in the form y = mx + b and choose the intervals that contain m and b.

$$(-9, -8)$$
 and $(-10, 3)$

A.
$$m \in [-13, -7]$$
 $b \in [107, 110]$

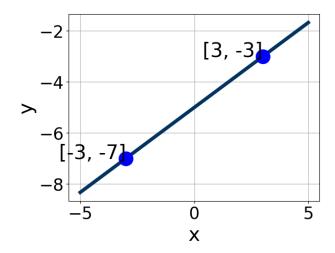
B.
$$m \in [5, 13]$$
 $b \in [110, 116]$

C.
$$m \in [-13, -7]$$
 $b \in [13, 19]$

D.
$$m \in [-13, -7]$$
 $b \in [-113, -106]$

E.
$$m \in [-13, -7]$$
 $b \in [0, 4]$

18. Write the equation of the line in the graph below in Standard Form Ax + By = C. Then, choose the intervals that contain A, B, and C.



- A. $A \in [-0.9, -0.3], B \in [-1.86, -0.87], \text{ and } C \in [3, 12]$
- B. $A \in [-0.9, -0.3], B \in [0.8, 2.46], \text{ and } C \in [-11, -4]$
- C. $A \in [0.5, 2.3], B \in [1.88, 3.18], \text{ and } C \in [-20, -12]$
- D. $A \in [-5.1, -1.8], B \in [1.88, 3.18], \text{ and } C \in [-20, -12]$
- E. $A \in [0.5, 2.3], B \in [-3.74, -2.96], \text{ and } C \in [12, 16]$
- 19. First, find the equation of the line containing the two points below. Then, write the equation in the form y = mx + b and choose the intervals that contain m and b.

$$(-7, -10)$$
 and $(4, -5)$

- A. $m \in [-1.05, -0.36]$ $b \in [-3.31, -3.02]$
- B. $m \in [0.14, 0.87]$ $b \in [6.13, 6.98]$
- C. $m \in [0.14, 0.87]$ $b \in [-9.15, -8.92]$
- D. $m \in [0.14, 0.87]$ $b \in [-6.97, -6.66]$
- E. $m \in [0.14, 0.87]$ $b \in [-3.08, -2.79]$
- 20. Solve the equation below. Then, choose the interval that contains the solution.

$$-17(-4x - 5) = -16(-12x + 19)$$

A.
$$x \in [-2.58, -1.04]$$

B.
$$x \in [0.12, 1.3]$$

C.
$$x \in [0.92, 2.31]$$

D.
$$x \in [2.37, 3.57]$$

- E. There are no real solutions.
- 21. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{-6x-7}{8} - \frac{3x+9}{7} = \frac{-5x-9}{4}$$

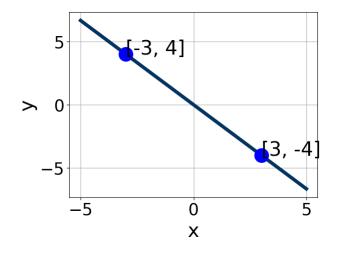
A.
$$x \in [-39, -36.6]$$

B.
$$x \in [-0.8, 0.2]$$

C.
$$x \in [97.1, 99]$$

D.
$$x \in [-2.6, -1.1]$$

- E. There are no real solutions.
- 22. Write the equation of the line in the graph below in Standard Form Ax + By = C. Then, choose the intervals that contain A, B, and C.



A.
$$A \in [0.33, 2.33], B \in [-1.2, 0.9], \text{ and } C \in [-3, 6]$$

B.
$$A \in [0.33, 2.33], B \in [0.2, 2.1], \text{ and } C \in [-3, 6]$$

C.
$$A \in [3, 5], B \in [2.9, 4.9], \text{ and } C \in [-3, 6]$$

D.
$$A \in [3, 5], B \in [-4.6, -2.1], \text{ and } C \in [-3, 6]$$

E.
$$A \in [-5, -1], B \in [-4.6, -2.1], \text{ and } C \in [-3, 6]$$

23. Find the equation of the line described below. Write the linear equation in the form y = mx + b and choose the intervals that contain m and b.

Parallel to 5x + 6y = 12 and passing through the point (9, 2).

A.
$$m \in [-1.23, -0.94]$$
 $b \in [6.2, 11.4]$

B.
$$m \in [-0.98, -0.67]$$
 $b \in [-10.7, -8.1]$

C.
$$m \in [-0.98, -0.67]$$
 $b \in [6.2, 11.4]$

D.
$$m \in [0.59, 0.84]$$
 $b \in [-6.6, -2.7]$

E.
$$m \in [-0.98, -0.67]$$
 $b \in [-7.4, -6.1]$

24. Solve the equation below. Then, choose the interval that contains the solution.

$$-7(-11x+8) = -9(-5x-4)$$

A.
$$x \in [-0.79, -0.5]$$

B.
$$x \in [0.45, 0.7]$$

C.
$$x \in [2.28, 3.02]$$

D.
$$x \in [-0.02, 0.34]$$

E. There are no real solutions.

25. Find the equation of the line described below. Write the linear equation in the form y = mx + b and choose the intervals that contain m and b.

Perpendicular to 7x-4y=12 and passing through the point (-8,-10).

A.
$$m \in [-0.8, -0.5]$$
 $b \in [14.57, 15.57]$

B.
$$m \in [-0.8, -0.5]$$
 $b \in [-4, 0]$

C.
$$m \in [-2.2, -1.59]$$
 $b \in [-15.57, -10.57]$

D.
$$m \in [-0.8, -0.5]$$
 $b \in [-15.57, -10.57]$

E.
$$m \in [0.38, 1.39]$$
 $b \in [-8.43, -4.43]$

$$\frac{9x-8}{7} - \frac{9x+5}{3} = \frac{-9x-7}{4}$$

A.
$$x \in [-4.3, -3.1]$$

B.
$$x \in [9.5, 12.2]$$

C.
$$x \in [-0.6, 0.4]$$

D.
$$x \in [1.2, 3]$$

- E. There are no real solutions.
- 27. First, find the equation of the line containing the two points below. Then, write the equation in the form y = mx + b and choose the intervals that contain m and b.

$$(-10, 10)$$
 and $(-8, -4)$

A.
$$m \in [-7, 0]$$
 $b \in [15, 26]$

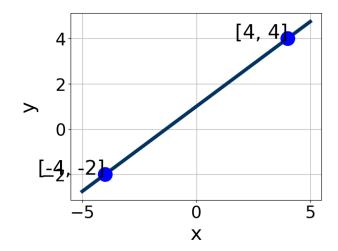
B.
$$m \in [2, 13]$$
 $b \in [49, 59]$

C.
$$m \in [-7, 0]$$
 $b \in [2, 6]$

D.
$$m \in [-7, 0]$$
 $b \in [-64, -56]$

E.
$$m \in [-7, 0]$$
 $b \in [57, 66]$

28. Write the equation of the line in the graph below in Standard Form Ax + By = C. Then, choose the intervals that contain A, B, and C.



- A. $A \in [2.6, 5.1], B \in [-4.19, -2.6], \text{ and } C \in [-5.2, -2.9]$
- B. $A \in [-2.4, 2.1], B \in [-1.84, -0.71], \text{ and } C \in [-1.1, 0.7]$
- C. $A \in [2.6, 5.1], B \in [2.4, 4.21], \text{ and } C \in [2.8, 4.9]$
- D. $A \in [-2.4, 2.1], B \in [0.92, 1.29], \text{ and } C \in [0.7, 1.2]$
- E. $A \in [-3.2, -1.6], B \in [2.4, 4.21], \text{ and } C \in [2.8, 4.9]$
- 29. First, find the equation of the line containing the two points below. Then, write the equation in the form y = mx + b and choose the intervals that contain m and b.

$$(-9,11)$$
 and $(-2,-10)$

- A. $m \in [-5, 0]$ $b \in [-24, -13]$
- B. $m \in [-5, 0]$ $b \in [-8, -7]$
- C. $m \in [-5, 0]$ $b \in [14, 17]$
- D. $m \in [1, 5]$ $b \in [-6, -3]$
- E. $m \in [-5, 0]$ $b \in [20, 24]$
- 30. Solve the equation below. Then, choose the interval that contains the solution.

$$-10(-5x-3) = -8(-9x-12)$$

- A. $x \in [-7.5, -4.6]$
- B. $x \in [-1.2, -0.3]$
- C. $x \in [5, 6.7]$
- D. $x \in [-4.3, -2.1]$
- E. There are no real solutions.

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